

# **Oil Spill Exercise Generator Help Notes**

#### Credits:

**U.S. Environmental Protection Agency Region 5**: K. Reshkin, A. Whelan, S. Calovich **Purdue University:** K. Embleton, H. Fahmi, Y. Kurokawa, Maliki, C. Nyquist, M. De Gortari, D. Jones

# Disclaimer:

(C) Copyright, 2000 by Purdue Research Foundation, West Lafayette, Indiana 47907. All Rights Reserved. This material may be reproduced and distributed in its entirety for non-profit, educational use, provided appropriate copyright notice is acknowledged. For all other intended reprint of this material, contact Farm Building Plan Service, 1146 AGEN, Agricultural & Biological Engineering Department, Purdue University, West Lafayette, IN 47907-1146.

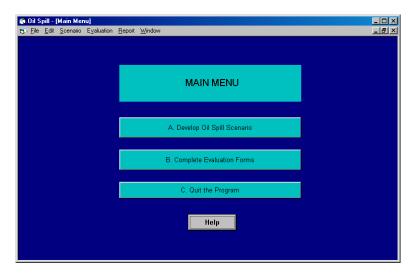
# Introduction:

This program was developed to fill a specific niche in the development and evaluation of exercises and/or response drills. The program will, with appropriate inputs by the user, write a scenario, provide canned weather, and provide inputs or messages to move the exercise along. The user must add in all appropriate references to customize the scenario and messages to a locality. The weather is set to a default, but may be customized as well.

In addition, an evaluation checklist is provided for each of the elements listed in the Preparedness for Response Exercise Program (PREP) developed by the United States Coast Guard, the Environmental Protection Agency, the Office of Pipeline Safety and the Mines and Minerals Service. The checklist, if filled out and transferred into a word processing system, will provide the basis for the development of an evaluation report.

This program provides the tools for an evaluator to use but does not replace the invaluable presence of a knowledgeable and independent evaluator. An evaluator is essential to see the complex interactions that drive decision-making, and to appreciate the choices made or not made by the players. Suggestions for improvement come from the evaluator's experience and not from this program. The final report is the compilation of the checklist and any other observations and suggestions that the evaluator may include.

Many other tasks go into the development, conduct, and evaluation of a successful exercise. For a more comprehensive discussion of the entire exercise process, please consult other documents such as NRT-2 Developing a Hazardous Materials Exercise Program, a handbook for State and Local Officials or contact your local Emergency Management Agency.



#### **MAIN MENU**

The Oil Spill Exercise Generator will help you create a drill for evaluating oil spill response.

# **Develop Oil Spill Scenario**

In the scenario generation process, you provide information concerning responsible parties, oil release, release site, human and environmental threats and weather conditions. You will create and schedule messages to be delivered to exercise players during the actual drill; these messages furnish a variety of situations that must be responded to and provide a chronology to the exercise.

#### **Complete Evaluation Forms**

The Exercise Evaluation Kit provides blank PREP evaluation forms for use during the evaluation of an oil spill exercise as it is being enacted. The forms can either be completed electronically or filled out in paper format. Evaluation information entered into the computer can be saved as a text file for later use in the development of a master report.

# **Getting Started**

Using your mouse, click the button for the section you would like to work on. You can exit the program by clicking the button labeled "C. Quit the program".

# Help

Click on the "Help" button for information about the current screen. When you hold your mouse over a button, an explanation of its function will appear in a small banner beside it.



#### SPILL SCENARIO DEVELOPMENT MENU

Creating an oil spill exercise has been broken into three steps: Build Scenario, Select Messages, and Describe Weather. Each section generates a separate report, and the three reports together make up an exercise. We recommend that you perform these steps in order, but it is not a requirement. Click on the step you wish to perform.

# **Build Scenario**

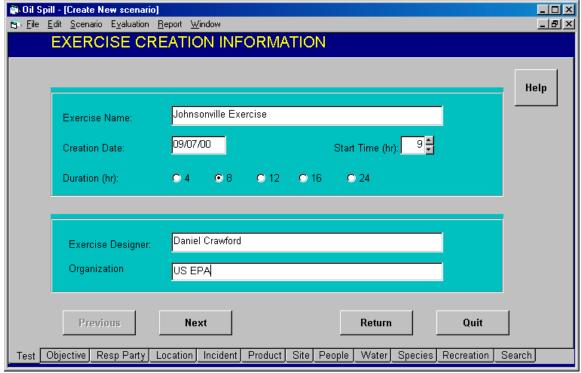
This section contains a series of forms. The first 11 gather information about responsible parties, oil release, release site, and potential threats. The 12th form lets you select a spill scenario from a database of prepared scenarios. You can edit the text of the scenario to meet your needs. When you save your work, an exercise report is generated, which you may print or save in HTML format.

### **Select Messages**

This section assembles a series of messages that will be delivered to the participants acting out the exercise. These messages create situations requiring responses whereby the players can be evaluated according to the exercise objectives. The messages also help move the spill simulation along in time. You select messages from a database of prepared messages which test each of the objectives. You can edit the messages to fit your needs. You establish a delivery schedule for the messages. When you save your work, a message report is generated, which you may print or save in HTML format.

#### **Describe Weather**

The Weather section allows you to specify weather conditions during the exercise. The exercise is broken into four equal-duration time blocks. The database will generate a set of default weather values based on your specifications of location, time of year, precipitation, temperature, and wind conditions. You can modify these values and add comments. When you save your work, a weather report is generated, which you may print or save in HTML format.



#### **EXERCISE CREATION INFORMATION**

You can use the mouse or the Tab key to move around in the form.

Exercise Name: Up to 30 characters.

Creation Date: Use the format mm/dd/yy.

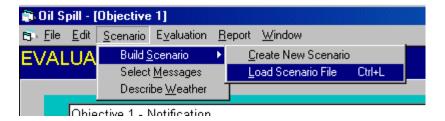
**Start Time\*:** Use the 24-hour clock (e.g. 3:00 pm =15:00), and pick a time on the hour. (Change the numbers by clicking the up/down arrows on the right edge of the box. You can click and hold on an arrow to change values rapidly.)

**Duration\*:** Tell how long the spill exercise will run, in hours. (These are "Radio buttons": small round buttons which show a blank circle when they are "off" and a black dot in the circle when they are "on". They come in groups and you can only select one item in the group; select it by clicking on it.)

Exercise Designer: Up to 30 characters.

Organization: Up to 30 characters.

\*This information will be used to auto-fill forms in the Select Messages section.

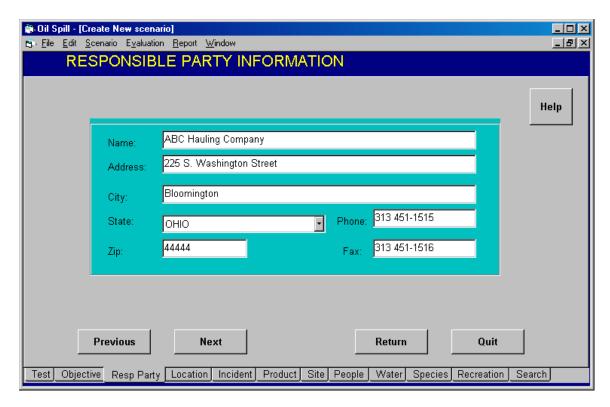


To load the last scenario you worked on, use the pulldown menus: Scenario, Build Scenario, Load Scenario File or Ctrl-L on your keyboard.



# **OBJECTIVES**

You can select among 16 exercise objectives for evaluation. You should design the oil spill exercise so that it tests the objectives you've chosen. Select an objective by clicking in the Yes column. (These are "radio buttons": small round buttons which show a blank circle when they are "off" and a black dot in the circle when they are "on". They come in groups and you can only select one item in the group; select it by clicking on it.)



#### **RESPONSIBLE PARTY INFORMATION**

You can use the mouse or the Tab key to move around in the form.

Enter the name and contact information of the person, agency or organization that is responsible for the oil at the time of release. For example, if the oil release occurs due to tank failure at an industrial storage yard, include the yard owner's name and contact information. If the oil release occurs as a result of a transportation accident, use the hauler.

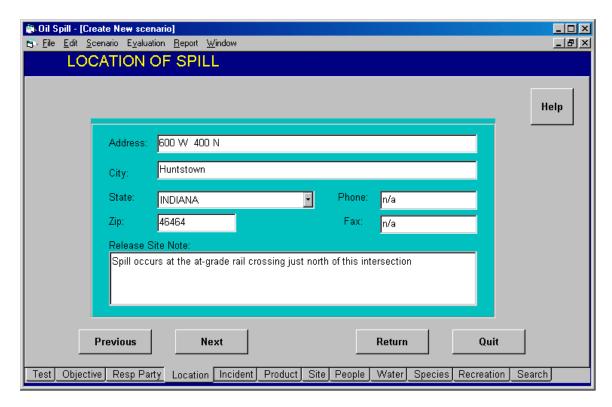
Name: Up to 30 characters.

Address: Up to 50 characters.

City: Up to 30 characters.

**State (or Province):** Choose from the pull-down list. (It's a box with a down arrow on the right. Click on the arrow to activate the list. Scroll through the list until you see the item you want. Click on that item to make it appear in the box.)

**Zip Code:** Up to 10 characters. **Phone, Fax:** Up to 22 characters.



#### **LOCATION OF SPILL**

You can use the mouse or the Tab key to move around in the form.

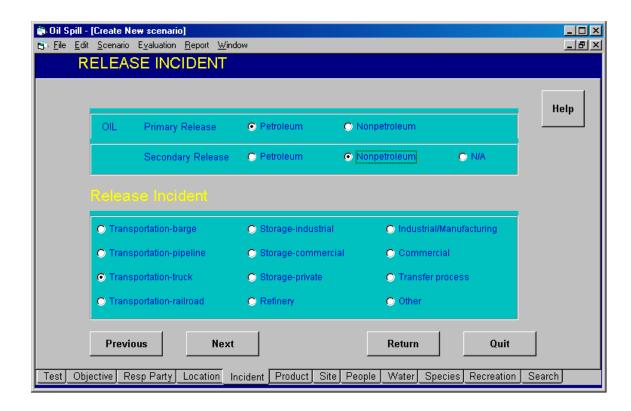
Enter the location of the oil release for this exercise. (Note: This information may be the same as the Responsible Party Information from the previous form.) If a specific street address is not available, describe the spill location with respect to well known or easily found benchmarks, such as highway markers. You may describe the spill location further in the note box provided.

**Address**: Up to 30 characters. **City:** Up to 30 characters.

**State (or Province):** Choose from the pull-down list. (It's a box with a down arrow on the right. Click on the arrow to activate the list. Scroll through the list until you see the item you want. Click on that item to make it appear in the box.)

**Zip Code:** Up to 10 characters. **Phone, Fax**: Up to 22 characters.

**Release Site Note**: A memo field with a scroll bar on the right; you can type freely in it. You can cut and paste text using the Edit menu at the top of your screen, or using keyboard commands (Ctrl-X = cut, Ctrl-V= paste, Ctrl-C= Copy).

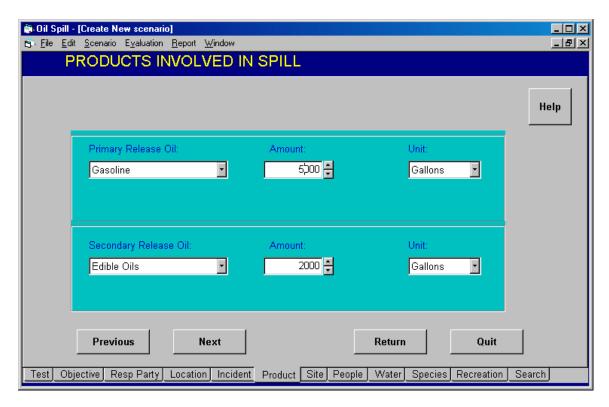


# **RELEASED PRODUCT**

Indicate whether the released oil is petroleum or non-petroleum based by clicking the mouse on the circle next to the appropriate label. Your selection is indicated by a black dot. You can select an optional secondary release.

### **RELEASE INCIDENT**

Indicate the nature of the oil release by clicking the mouse on the circle next to the appropriate label. You can select "Other" if you wish to define a release event that doesn't match any of the categories provided.



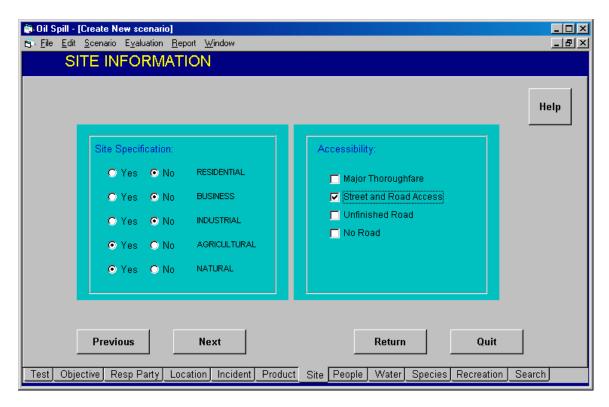
#### PRODUCTS INVOLVED IN SPILL

**Oil:** Select the oil for this spill exercise from the scrolling list. (Scroll through the list until you see the substance you want. Click on it to make it appear in the box.)

The list you see depends on whether you chose a petroleum or non-petroleum oil on the previous form.

**Amount**: In steps of 25 (Change the numbers by clicking the up/down arrows on the right edge of the box. You can click and hold on an arrow to change values rapidly.)

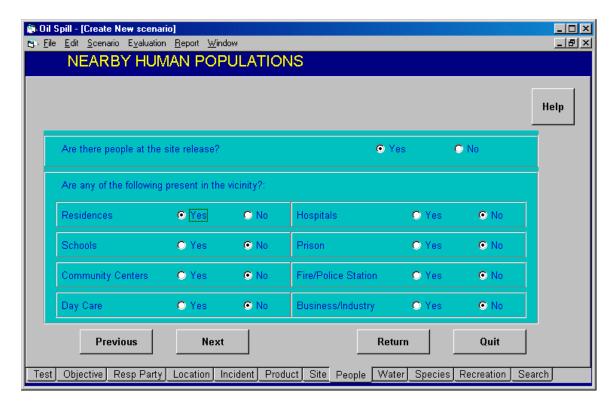
Unit: Choose from the pull-down list. (It's a box with a down arrow on the right. Click on the arrow to activate the list. Scroll through the list until you see the item you want. Click on that item to make it appear in the box.)



#### SITE INFORMATION

**Site Specification:** Choose a site description by clicking in the Yes column. (These are "Radio buttons": small round buttons which show a blank circle when they are "off" and a black dot in the circle when they are "on". They come in groups and you can only select one item in the group; select it by clicking on it.)

**Accessibility**: To select type of access, click in the check box beside your answer(s). You can select more than one option at once (because a site could be located at the intersection of a major thoroughfare and an unfinished road), but if you choose "No Road", it will cancel out any other choices you've made.



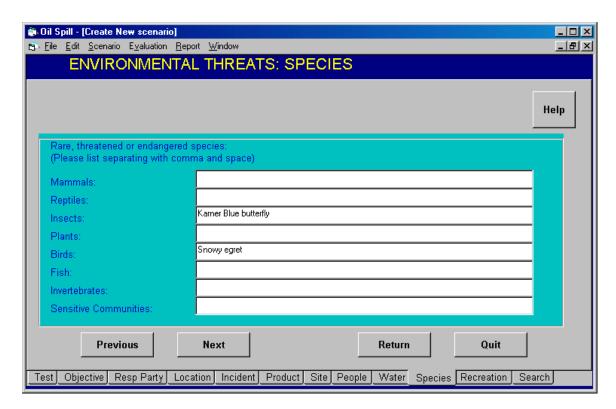
#### **NEARBY HUMAN POPULATIONS**

Answer the questions by clicking in the Yes or No columns. (These are "Radio buttons": small round buttons which show a blank circle when they are "off" and a black dot in the circle when they are "on". They come in groups and you can only select one item in the group; select it by clicking on it.)



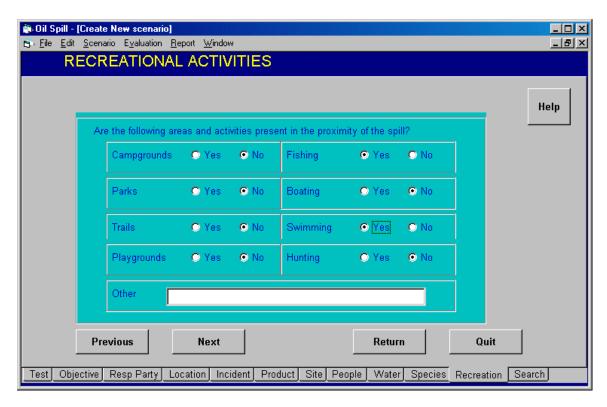
# **ENVIRONMENTAL THREATS - WATERWAYS**

Answer the question by clicking in the Yes or No columns. (These are "Radio buttons": small round buttons which show a blank circle when they are "off" and a black dot in the circle when they are "on". They come in groups and you can only select one item in the group; select it by clicking on it.)



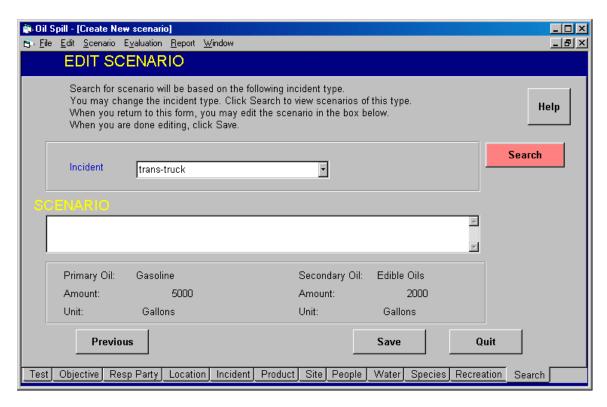
# **ENVIRONMENTAL THREATS - SPECIES**

Up to 50 characters. Enter names of rare, threatened, or endangered species in the vicinity of the spill, separating names by a comma and a space.



#### **RECREATIONAL ACTIVITIES**

Answer the question by clicking in the Yes or No columns. (These are "Radio buttons": small round buttons which show a blank circle when they are "off" and a black dot in the circle when they are "on". They come in groups and you can only select one item in the group; select it by clicking on it.) If activities are missing, add them in the memo field labeled "Other" (up to 50 characters).

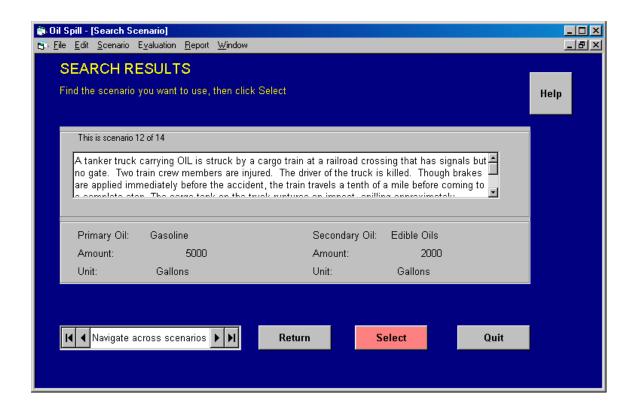


#### **EDIT SCENARIO**

The incident type has been pre-selected based on the information you gave in the Release Incident form. To change the incident type, choose one from the pull-down list. (It's a box with a down arrow on the right. Click on the arrow to activate the list. Scroll through the list until you see the item you want. Click on that item to make it appear in the box.)

Next click the Search button.

You'll see the Search Results screen where you can browse through spill scenarios and pick one.



# **SCENARIO SEARCH**

You got here by clicking the Search button on the Edit Scenario form. What you see is one of the scenarios that matches your incident type. On the left, it tells how many matches you got, for example: "This is scenario 1 of 5".

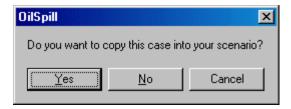
You can view the other matching scenarios by clicking the forward/back buttons at the bottom of the page. (These function like the buttons on a CD player. From left to right they mean: the first item in the list, the previous item, the next item, the last item in the list.)

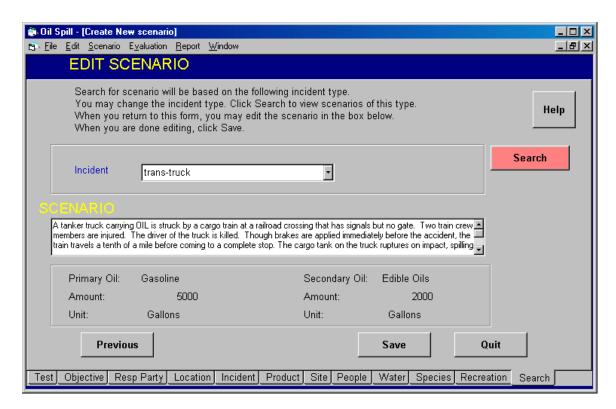
When you find the scenario you want, select it by clicking the Select button. You will be returned to the previous screen (Edit Scenario) where you can edit the text of the release scenario.

If you don't want to use any of the scenarios displayed, you can either:

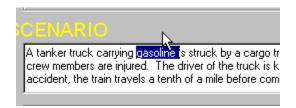
- Click Return to go back to the Edit Scenario screen, choose a different incident type from the pull-down list (this will not change what you selected on the Release Incident form), and repeat the search until you find a scenario you like. You can edit the scenario to suit the type of incident you are planning.
- Select any scenario, then when you return to the Edit Scenario screen, delete it in the text window and type in an entirely new scenario.

Note: Any edits you make to a scenario will not be saved in the permanent database. Your work will be saved in the Scenario report.





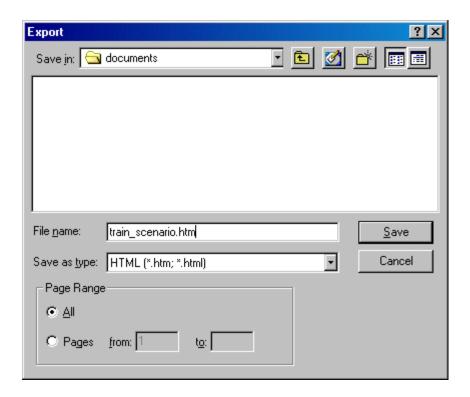
Once you've selected it, you will return to the Edit Scenario screen, where you can edit the scenario by typing right in the memo field. (You can cut and paste text using the Edit menu at the top of your screen, or using keyboard commands (Ctrl-X = cut, Ctrl-V= paste, Ctrl-C= Copy).



You can also replace the entire scenario with one you write yourself. It won't get stored in the database of scenarios, but you can save it in the scenario report.

#### SAVING THE SCENARIO YOU'VE BUILT

Click the Return button. When asked "Do you want to save changes?", click Yes. This will open a Save to File window. We recommend that you save the scenario in the following directory: oilspill\document\scenario\.



# PRINTING YOUR SCENARIO (and all other reports)

Using the pulldown menus at the top of the screen, choose Report, then Scenario to bring up the report previewing and printing window. You can also use Ctrl-S to bring up this window. Your choices are

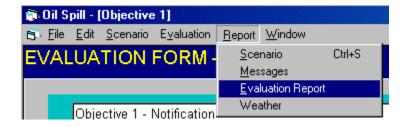
Preview

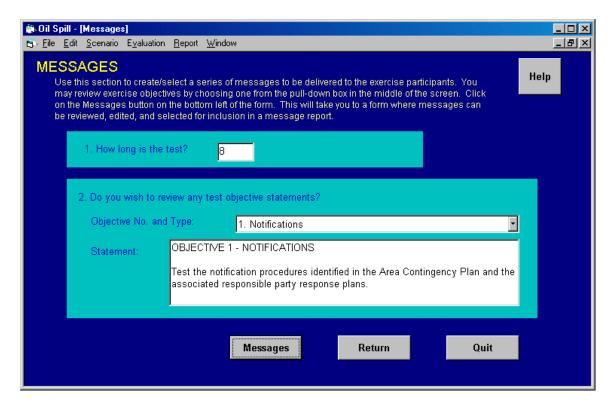
Print

Save

Return

Use the Report pulldown menu to view and print other reports.





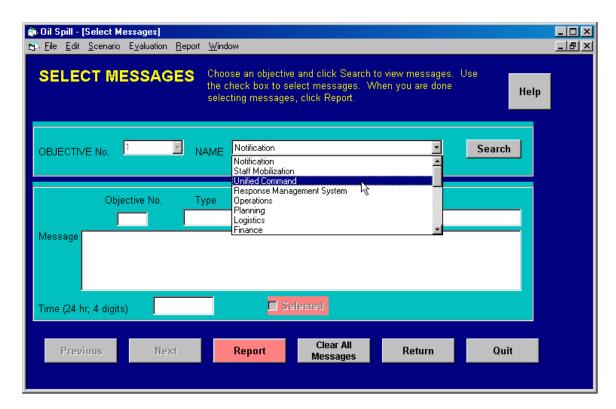
#### **MESSAGES**

Use this section to create/select a series of messages to be delivered to the exercise participants. Messages included in the exercise can be tagged with a delivery time. Each message is associated with a test objective.

The test length is included based on your earlier input.

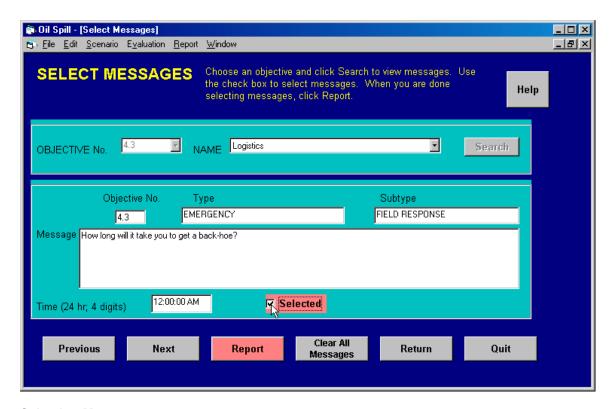
You may review exercise objectives by choosing one from the pull-down box in the middle of the screen.

Click on the Messages button on the bottom left of the form. This will take you to a form where messages can be reviewed, edited, and selected for inclusion in a message report.



#### **SELECT MESSAGES**

Use this form to choose messages for the exercise message report. Messages are associated with specific test objectives and have been further defined by Type and Subtype. The top section of the form is where you choose which objective you want to test, and the bottom section displays the objective number, type, and subtype of the message shown in the "Message" text box.



# **Selecting Messages**

Choose the objective you want to test and click the "Search" button to view messages. The first matching message will be displayed in the text box. You can select the message (click the "Selected" check box to add it to your collection of messages) or use the "Previous" and "Next" buttons to look at other messages.

#### **Editing Messages**

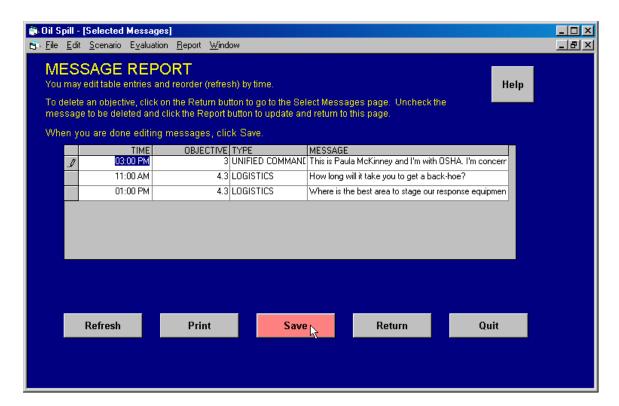
Messages can be edited or rewritten. To make a completely new message, delete the contents of the message display box and enter new text. When you have finished your edits, check the "Selected" check box. NOTE: ANY CHANGES YOU MAKE WILL REMAIN IN THE PROGRAM'S DATABASE OF MESSAGES. To get back to the original messages that came with the program, you must re-install the program.

#### Specifying delivery times

Once you've picked a message and edited it, you must choose a delivery time for it. The message delivery time must be entered using the 24 hour clock. Also it must be in the format of 00:00 (for example, to enter 3pm, you must enter 15:00 -- 9:15 or 24:89 are not valid). If no time is indicated, the message will be assigned a time of "zero" and will appear at the beginning of the report. Note: You will also be able to change delivery times when you view the report.

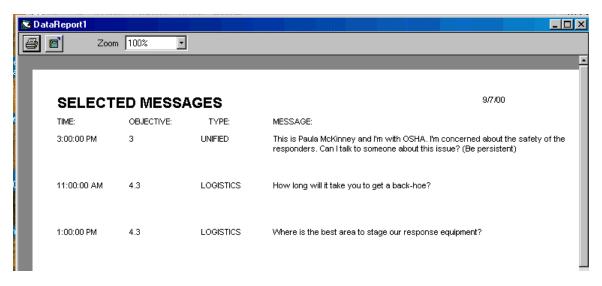
#### When you're done...

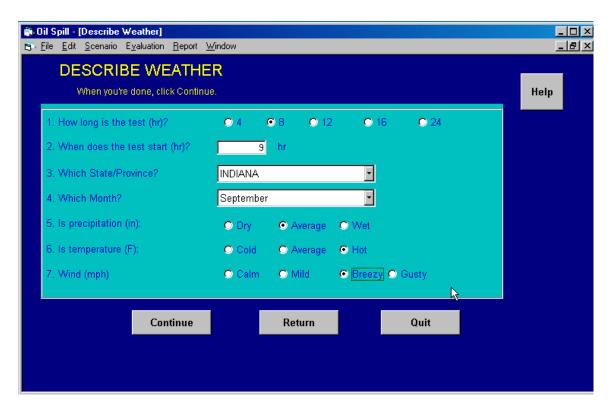
Once you've selected all your messages, click the pink "Report" button to save them.



#### **MESSAGE REPORT**

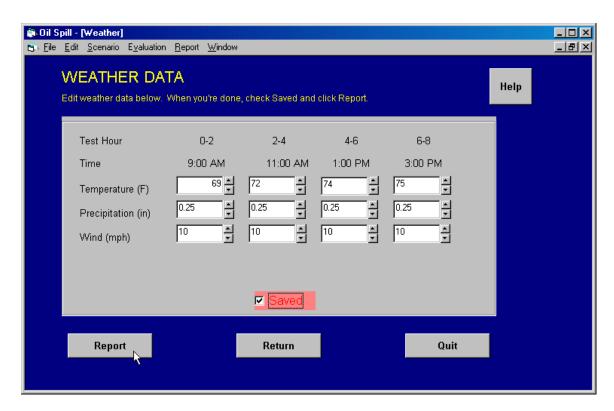
The messages you have selected for the message report are displayed in chronological order. You can edit the time and/or text of any message. After making edits, click on the Refresh button on the bottom of the screen. This will cause the messages to be ordered in the correct time sequence. Click on the Save button to save the report to a file. Click on the Print button to generate a printout.





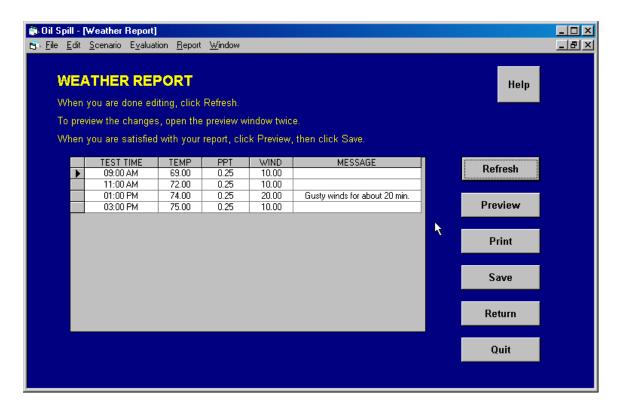
# **DESCRIBE WEATHER**

Use the radio buttons and drop-down menus to specify the weather conditions for your spill exercise. After you are done with all the selections, click "Continue" to create a weather report.



# **WEATHER DATA**

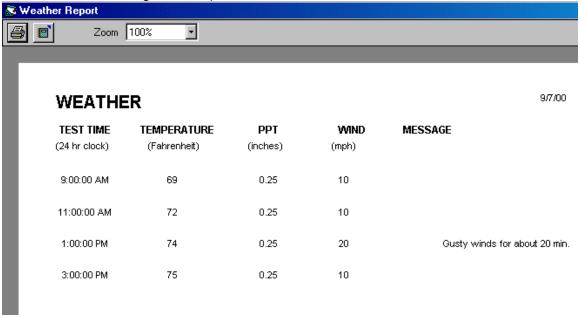
Use the radio buttons and drop-down menus to specify the weather conditions for your spill exercise. After you are done with all the selections, click the "Report" button to create a weather report.



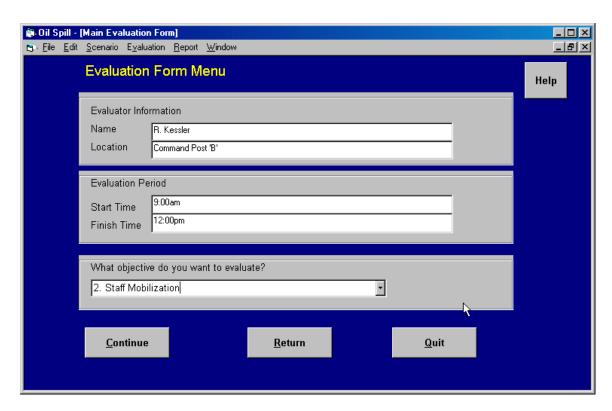
#### **WEATHER REPORT**

The weather data and any messages you add are displayed in chronological order. You can edit any of the fields in the report. After making edits, click on the Refresh button to re-order the items in the correct time sequence. NOTE: Any changes to the order of weather report items will not be reflected in the printed report.

Click the Print button to generate a printout.



Click Return to go back to the Describe Weather Screen.

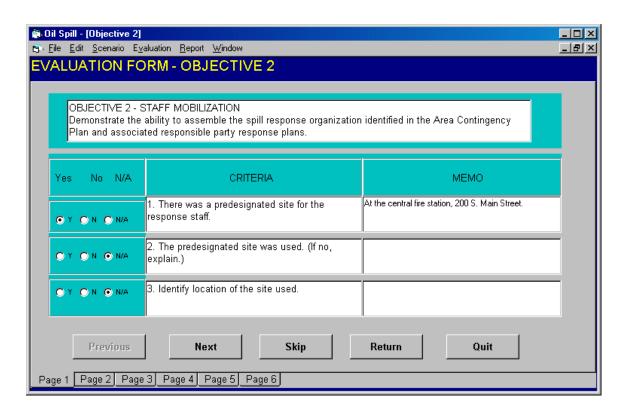


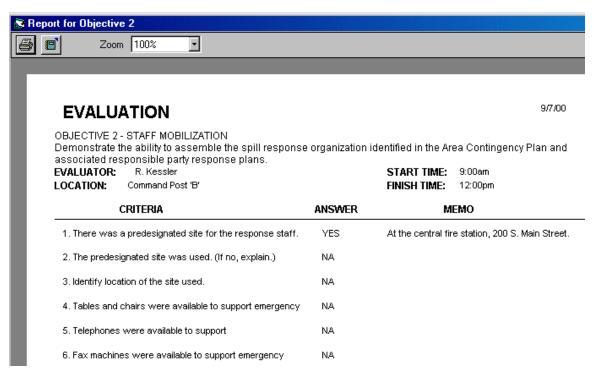
#### **EVALUATION Forms**

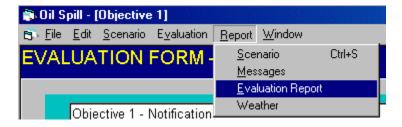
This section contains 23 evaluation forms which cover the various objectives. Fill in the evaluator information on this screen, then choose an objective from the pull-down list and click Continue to begin.

Name: up to 32 characters Location: up to 50 characters

You may fill out as many forms as you want. To make this easier, we've added a Next Objective button on the last page of every evaluation form, and a Skip button on the first page of every evaluation form. When you complete one evaluation form, use Next Objective to bring up the next evaluation form. (You'll be prompted to save your answers before you proceed.) If you don't want to complete the next form, you can click Skip to advance to the following form. (Answer No when you're asked if you want to save changes).







#### **PRINTING REPORTS**

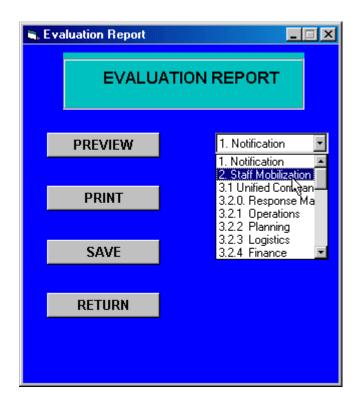
Using the pulldown menus at the top of the screen, choose Report, then which type of report to bring up the report previewing and printing window. You can also use Ctrl-S to bring up this window. Your choices are

Preview

Print

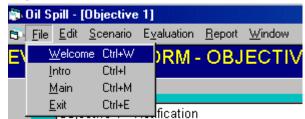
Save

Return

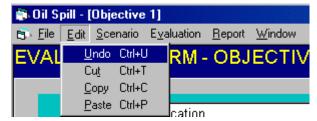


#### **PULLDOWN MENUS**

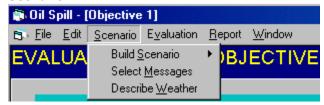
#### **File**



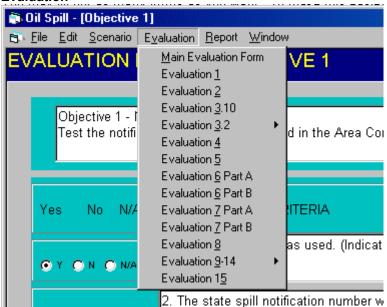
#### Edit



#### Scenario

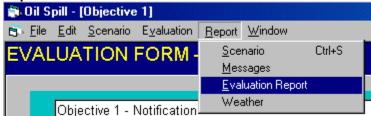


#### **Evaluation**



# PULLDOWN MENUS (cont'd)

Report



Please direct all comments and questions concerning this manual to: Karen Reshkin USEPA Region 5 77 W. Jackson Blvd. Chicago, IL 60604 reshkin.karen@epa.gov

7 September 2000